

## Sandia Solar PPA RFI/Market Research

The requested information is for preliminary planning purposes only and does not constitute an obligation by Sandia National Laboratories or WAPA to enter into a contractual agreement. Nor does it constitute a commitment, implied or otherwise, that the Sandia National Laboratories or WAPA will issue an RFP in the future. Sandia National Laboratories and WAPA will not be responsible for any costs incurred by offerors in furnishing this information.

### A. Background

This Request for Information (RFI) is issued by the Western Area Power Administration (WAPA) on behalf of the Department of Energy's Sandia National Laboratory (DOE/Sandia), located in Albuquerque, New Mexico. The goal of this RFI is to solicit information from the solar industry to assist WAPA and Sandia in structuring a possible future solicitation for a 5-10 MW on-site solar power purchase agreement (PPA). Should DOE/Sandia determine that a solar PPA would be beneficial to the government, a solicitation would be issued by the end of calendar year 2017 with solar project construction completed no later than calendar year 2019 before the federal investment tax credit is reduced to 26% in 2020.

DOE/Sandia is considering a solar project for the following reasons:

1. To protect against volatile energy markets
2. To reduce costs
3. Local economic benefits
4. Education
5. To increase renewable use

Sandia is not currently considering off-site solar generation or other non-solar energy conservation measures under this RFI.

### B. Description

The Sandia site consists of 914 buildings on over 13,740 acres of land.

- DOE/Sandia is considering three types of solar installations as part of this PPA:
  - Ground-mount solar projects on various flat areas with excellent solar access (no adjacent buildings or trees) ranging from 12 to 20 acres, all within 20-30' feet of distribution voltage (12.47-kV) connection points and 10-20' feet of a road.
  - Ballasted roof mount systems on buildings outside of restricted areas.
  - Carport PV systems at three parking lots ranging from 11 to 16.5 acres that also have excellent solar access. The carports systems must be designed to minimize any ice build-up, include storm water management considerations, and must meet FM 1-90 wind load requirements.
- All solar installations shall comply with all Sandia code requirements

Following is additional information regarding the potential solar project and important considerations:

1. The solar project shall include the photovoltaic modules, inverters, electrical connections, disconnects and all other electrical components necessary to provide a fully functional system that will connect to Sandia's existing 12.47KV distribution system. The point of demarcation shall be at the primary side of the generation plant's step-up transformer. The system shall be operated and maintained, including all inverter and other equipment replacement for the life of the contract.
2. National Environmental Policy Act (NEPA) requirements will be met by the DOE NNSA Sandia Field Office. The NEPA process will consider cultural/archeological and biological considerations.
3. Davis Bacon Act is likely applicable for installation/construction, and the maintenance aspect will likely be Service Contract Act applicable.
4. A Safety Plan is required for the project and should be considered in determining indicative pricing. The safety plan shall be in conformance with the Sandia specification 01065 and conducted in accordance with 10 CFR 851.
5. The site is access controlled since Sandia is co-located with Kirtland Air Force Base. Sandia will provide the necessary access for the life of the PPA to include design, construction, and on-going operations.
6. Real-time production data will need to be provided to the Los Alamos County Merchant Desk.

### **C. Sandia's Electricity Supply and Electricity Consumption**

DOE/NNSA is the lead agency for procuring electricity for DOE/Sandia. DOE/NNSA has an intra-agency agreement with WAPA to serve as the purchasing agent for wholesale power for Kirtland Air Force Base (KAFB) and DOE/Sandia. WAPA has a transmission service agreement with the Public Service Company of New Mexico (PNM) to allow delivery of power from WAPA to DOE/Sandia through PNM's transmission system. Power is delivered to KAFB and DOE/Sandia at the 115kV and 46kV transmission levels at PNM's Sandia 46kV/115kV and Kirtland 115kV stations.

In FY2016, DOE/Sandia had a peak demand of 44.9 MW and an electric energy consumption of approximately 247 GWh.

### **D. Questions**

The following questions should be addressed in your response.

1. What types of incentives – tax credits, rebates, etc. – can be used to reduce the electricity price, considering the systems are being installed on federal property, but will be privately owned?
2. Provide non-binding indicative pricing (in cents/kWh) and estimated first year energy generation for each of the following scenarios (excluding interconnection costs), taking into account the incentives listed in your answer to question #1:
  - a. 12 acre ground-mount PV system
    - i. Fixed price
    - ii. With a 2% escalation rate
  - b. 20 acre ground-mount PV system
    - i. Fixed price
    - ii. With a 2% escalation rate
  - c. 11 acre PV system with carport structure
    - i. Fixed price
    - ii. With a 2% escalation rate
  - d. 16.5 acre PV system with carport structure
    - i. Fixed price
    - ii. With a 2% escalation rate
  - e. Ballast mount PV system on roofs outside of secured areas
    - i. Fixed price
    - ii. With a 2% escalation rate
  - f. What would the price be if a. and b. were combined (32 acres total)?
  - g. What would the price be if c. and d. were combined (27.5 acres total)?
3. How much would a Buy American Act/Trade Agreement Act requirement increase the price?
4. Do you recommend that the solar renewable energy certificates (SRECs) be sold to improve the project economics? If so, how long would it be beneficial to sell the SRECs and what is the estimated SREC price/year? Any additional comments on the New Mexico SREC market.
5. What is the preferred contract length, keeping in mind tax incentive eligibility?
6. DOE/Sandia is interested in both unfirmed and firmed power. How would the power from the solar array be firmed and what would be the associated costs?
  - a. Do you recommend “smart inverters” to reduce firming costs?
7. Please provide the following information about your company: A short (1 page or less) summary of the company’s qualifications, major financial statistics, and a list of similar solar project contracts that are completed or currently in progress, with a special emphasis on those projects at a Federal site and/or in the same utility service territory. Also include net energy production supported by data from previous projects. Include customer information and location, number of megawatts installed, type of systems (i.e. roof

mount, ground mount, fixed, single/double axis tracked, car port, etc.) and type of contract.

8. Do you have any other suggestions or comments?

Submission of information does not commit a responding party to submit a proposal to any subsequent solicitation.

## **E. Responses**

Responses are limited to 10 pages. Please include contact names(s), address, phone number, and email. Any questions regarding the RFI should be included in the RFI response.

Responses will not be considered confidential. The Owner may use responses to structure future solicitations; therefore, do not provide confidential or proprietary information in your response.

Respondents are advised to avoid including any information in their responses that might be considered business sensitive, proprietary, or otherwise confidential. If, however, a commenter chooses to submit business sensitive, proprietary, or otherwise confidential information, it must be clearly and conspicuously marked as such in the response. In addition, (1) the header and footer of every page that contains confidential, proprietary, or privileged information must be marked as follows: "Contains Confidential, Proprietary, or Privileged Information Exempt from Public Disclosure" and (2) every line and paragraph containing proprietary, privileged, or trade secret information must be clearly marked with double brackets or highlighting. Failure to comply with these marking requirements may result in the disclosure of the unmarked information under the Freedom of Information Act or otherwise. The U.S. Federal Government is not liable for the disclosure or use of unmarked information and may use or disclose such information for any purpose. If a comment contains confidential, proprietary, or privileged information, the commenter must include a cover sheet identifying the specific pages containing confidential, proprietary, or privileged information.

Due Date for Responses and Submission Method:

*Submissions are due on July 14, 2017. Please email to [ljohnson@wapa.gov](mailto:ljohnson@wapa.gov)*